the affinities of the species and genus, general considerations on the family, the country, together with the method of cultivation, and the explanation of the plates in double columns in German. The following plants are treated of : Puya Altensteinii, n. sp.; Lobelia discolor, n. sp., from Mexico ; Olinia capensis, Kl., from the Cape, of which plant we cannot convince ourselves that it belongs to the Myrtacea; Oxalis Ottonis, Kl., from Cuba ; Microstylis histionantha, n. sp., from La Guayra; Oncidium Carthaginense, Swartz, from Maracaybo; Begonia punctata, n. sp., from Mexico; Asterostrichion sidoides, n. gen. et spec., Fam. Malvarece, from New Holland ; Acanthostachys strobilacea, n. gen. et spec., Fam. Bromeliacea, from South Brazil; Sisyrinchium majale, n. sp., from Valparaiso; Spiranthes Lindleyana, n. sp., from La Guayra and Caracas; Marianthus corruleo-punctatus, n. sp., from Van Diemen's Land. Linnaa, Part V. 1840.

## Verhandelingen over de Natuurlijke Geschiedenis der Nedelandsche Over-

 zeesche Bezittingen, door de Leden der Natuurkundige Commissie in Oost-Indië en andere Schrijvers.Under this title it is intended to publish, under the direction of the Government, a work which will give an account of the numerous discoveries which have been made in the various colonies of the Netherlands by their scientific expeditions. The Government will name a commission to superintend the printing and execution of the work. The various memoirs will be arranged in three divisions: 1. Zoology, 2. Botany, 3. Geography and Ethnography. Each division will form a volume in small folio, and will be illustrated with several lithographed plates. The price is moderate. Linnea, Part V. 1840.

## PROCEEDINGS OF LEARNED SOCIETIES.

LINNAAN SOCIETY.
November 17, 1840.-Mr. Forster, V.P., in the Chair.
Mr. Janson, F.L.S., exhibited specimens of the Neottia astivalis, discovered in August last by himself and Mr. Branch, near Lyndhurst, Hampshire, being the first time it had been observed in England.

Mr. Ogilby, F.L.S., exhibited a specimen in flower of a new species of clover recently introduced from Cabul, remarkable for the quantity of herbage which it yields. The species is very nearly related to Trifolium resupinatum.

Read, "Description of Aucklandia, a new genus of Composite, supposed to be the Costus of Dioscorides." By Hugh Falconer, M.D., Superintendent of the Honourable East India Company's Botanic Garden at Saharunpore. Communicated by Dr. Royle, F.R.S. \& L.S.

This interesting plant, the root of which, under the name of koot, forms an important article of Cashmeer commerce, is considered by Dr. Falconer as identical with the long-disputed Costus of the an-
cients, and his opinion appears to be borne out by the accordance of the root with the description given by Dioscorides, by the striking analogy of the Arabian synonym koost to its Greek and Cashmeer appellations, and also by the commercial history of the drug.

The roots, which are possessed of a strong aromatic and pungent odour, are collected in large quantities, principally for exportation to China, where they are held in high repute, as an aphrodisiac, and are also burnt as incense in the temples. The quantity annually collected varies from 10,000 to 12,000 khurwars (of 96 seers, or 192 lbs. ) or about $2,000,000 \mathrm{lbs}$. weight. At Canton the price per cwt. is $2 l .7 s .5 d$., while the cost at the depôt in Cashmeer is only $2 s .4 d$.

The plant is not held in much repute as a medicine by the Cashmeerians, who are only astonished at the estimation in which it is held in other countries; nor do they apply it to any other use than that of protecting bales of shawls from the attacks of moths : portions of the stem are, however, suspended from the necks of children to avert the "evil eye," and to expel worms.

The plant is regarded by Dr. Falconer as constituting the type of a new genus of Cynarea, which he has named in compliment to the present Governor-General of India; and as it was discovered during a journey in Cashmeer, commenced under Lord Auckland's auspices, and as it yields a valuable product, the application of the name becomes more appropriate from the useful direction of his lordship's views in promoting botanical investigation in India. The Aucklandia is a gregarious plant, growing in great abundance on the moist open slopes of the mountains which surround the valley of Cashmeer, at an elevation of from 8000 to 9000 feet above the level of the sea, but like some other plants of that region, it is extremely local, being confined to the immediate vicinity of the valley, although the Rheum emodi, Aconitum heterophyllum, and Rhododendron anthopogon, with which it is associated, are extensively distributed over the western Himalayas. The genus is nearly related to Saussurea, and is chiefly distinguished by the rays of its feathery pappus being disposed in two rows, and cohering by twos or threes at the base. The following is the author's character of the genus:

## AUCKLANDIA.

Capitulum homogamum. Antherarum cauda lanato-plumosæ. Pappi setacei lamella biseriales, plumosæ, basi ternatim quadriternatimve cohærentes, in annulum deciduum concretæ. Achenium glabrum. Herba orgyalis, radice perenni ramosâ crassâ, caule erecto simplici sulcato glabro folioso, foliis sublyratis margine setaceo-dentatis suprà glabris atrovirentibus subtùs glaucescentibus venis puberulis, capitulis numerosis terminalibus aggregatis, floribus atropurpureis.
Sp. A. Costus.
December 1.-Mr. Forster, V.P., in the Chair.
Mr. Gould, F.L.S., exhibited a specimen of a nondescript Lizard from New Holland, remarkable for the extreme aculeation of its scales.

Mr. William Cumming presented specimens of Lagurus ovatus, Briza maxima, and Mentha crispa, gathered by him in the vicinity of Saffron Walden, Essex.

Read, "On a White Incrustation on Stones, from the bed of the river Annan." By Edwin Lankester, M.D., F.L.S

During a short stay which the author made last summer on the banks of the Annan, in Dumfries-shire, his attention was arrested by the appearance of the stones on the banks of the river. Wherever a mass of gravel was exposed to the air, the surface of the stones appeared covered with a white incrustation, as if they had been white-washed. This appearance was more or less general on all the exposed banks, but was most evident on the stones nearest the water's edge. On examining the stones with a pocket-lens, their surface appeared covered with acicular crystals, and from this it was at first concluded that the incrustation arose from the crystallization of some salt abounding in the waters. On procuring, however, some stones from the water itself, they presented on their surfaces the filaments of a minute conferva, which appeared to be the source of the white crust; but as the existence of the conferva would not explain the crystalline appearance, it was examined under the microscope, and the appearance was found to proceed from minute acicular bodies about $\frac{1}{100}$ th of an inch long and $\frac{1}{2000}$ th of an inch broad, which were most of them arranged in a stellate form, but many were scattered in all directions. Running under the whole were the filaments of a minute conferva, on which the acicular bodies rested.

In Greville's Scottish Cryptogamic Flora, these bodies are referred to the genus Exilaria, but the stellate arrangement of the aciculæ gave them a different character to E. fasciculata. Hooker, in his continuation of Smith's ‘English Flora,' has placed Greville's supposed plant as a synonym of Diatoma truncatum, from which D. fasciculatum is not distinct.

In Ehrenberg's great work on the Infusoria, these bodies are figured and described under the head of Polygastric animalcules (p. 11. tab. xvii.) of the family Baccillaria. The genus to which they belong is Synedra, and is distinguished by the animal being furnished " with a simple siliceous prismatic carapace, when young attached by one end, when old often free, without any or only a slightly marked pedicel." The species which it most closely resembles is the Synedra Ulna (common Eel-animalcule), which is characterized by being striated with linear corpuscles, straight, truncated at the sides, flat on the back and belly, with the apex a little dilated as they become aged. The bodies from the Annan are not striated, nor are their ends dilated, although they appear full-grown. The siliceous skeletons in which these little animals are invested, will account for their white appearance. Although these bodies have been often described both as plants and animals, no notice appears to have been given of their producing the phænomenon here described.

Read also, "Observations on the Genus Derbe of Fabricius." By John O. Westwood, Esq., F.L.S.

After noticing the recent memoirs by Messrs. Percheron and Boheman on this almost unknown Fabrician genus, and its very close relationship to Otiocerus and Anotia of Kirby, the author shows that the Fabrician type of the genus D. hemorrhoidalis is quite distinct from the group described by the two first-mentioned authors as its type. He accordingly restricts the generic name Derbe to the typical species with the following characters :
Derbe. Rostrum ad medium abdominis extensum, articulo apicali minuto. Antennæ breviores. Oculi subrotundati. Alæ longiores, angustiores, costâ anticarum ante apicem incisâ, venis numerosis, longitudinalibus, in medio venis transversis conjunctis, medianâ ramos 10 longitudinales emittente ; alæ posticæ venâ postcostali 4-fidâ.
In addition to the typical species and the $D$. nervosa, Klug, Burm., the author adds the two following species to the typical group:

1. D. semistriáa, luteo-fulva; alis pallidis costâ magis fulvescenti venis nigricantibus strigisque tenuibus fuscis inter venas (nisi cellulis apicalibus) dispositis. Expans. alar. lin. 16 $\frac{1}{2}$. Brasilia. Mus. Westw.
2. D. strigipennis, pallidè fusco-lutea; dorso thoracis et carinâ faciei sanguineis, alarum venis fuscis strigisque tenuibus fuscescentibus inter venas omnes, ad apicem alarum carentibus, pedibus albidis. Expans. alar. lin. 14. Brasilia. Mus. Westw.
Mysidia. Rostrum ultra pedes posticos haud extensum. Antennæ mediocres. Oculi rotundati. Alæ breviores, latiores, pulverosæ; anticæ integræ, venis paucioribus, venâ medianâ ramos tres emittente, ramo medio bifido; posticæ venâ postcostali bifidâ aut trifidâ.
The variation in the position and number of the veins of the wings, affording a character of primary importance for distinguishing the preceding groups, the author has at some length entered into an examination of their normal state and direction, and the manner in which they become modified. The following species are referred to this subgenus : Derbe pallida, Fabr., (described and figured by Percheron from the Copenhagen Cabinet as the type of the genus), D. squamigera, Fab., D. costalis, Fab., and probably D. punctum, Fab., D. testacea, Fab., and D. uivea, Fab., as well as the following new species:
M. albipennis, parva, tenera; alis albis anticis puncto parvo ante medium costr, punctis nonnullis ad marginem internum venis transversis punctoque ante apicem nigris lunulisque parvis marginalibus fuscis. Expans. alar. lin. 8. Vera Cruz. Mus. Westw.
M. lactiflora, luteo-albida; capitis vertice et collaris margine antico parùm sanguineis, hujus margine postico et margine postico tegularum albis, alis albis margine antico lutescente versus basin maculis tribus parvis maculâque majori ante apicem nigris. Expans. alar. lin. 12 $\frac{1}{2}$. Brasilia. Mus. Westw.
M. subfasciata, alba; alis fusco transversè nebulosis punctoque ante apicem nigro ad basin areæ parvæ triangularis subapicalis venisque 4 transversis obscuris. Expans. alar. lin. Brasilia. Mus. D. Burchell, et Soc. Zool. Lond.

Lydda. Rostrum brevius. Antennæ breves. Alæ anticæ, valdè elongatæ, apice rotundatæ, directione venarum anomalâ ; regione venæ medianæ minimâ, aut potiùs ejus rami in venæ postcostalis ramos transformati.
The type of this subgenus is Derbe elongata, Fab., from New Holland, in the cabinet of the Linnæan Society.

Zeugma. Rostrum ultra basin pedum posticorum extensum. Antennæ rotundatæ. Ocelli obsoleti? Prothorax lateribus concavo-dilatatis pro antennis recipientibus. Alæ anticæ oblongo ovatæ, apice subtruncatæ, venis numerosis longitudinalibus; venâ postcostali ramos 8 posticè, medianâ tantùm tres emittente.
This subgenus appears intermediate between Derbe and Thracia on the one hand, and Mysidia on the other. The only species is-
Z. vittata, fulva; alis anticis flavidis vittâ latâ mediâ fuscâ apicem versus deflexâ alterâque posticâ parallelâ apice vittâ abbreviatâ fasciâque tenui transversâ fuscis. Expans. alar. lin. In Mus. Soc. Linn.
Thracia. Rostrum pectore longius. Antennæ capite ferè duplò longiores. Oculi orbiculati. Ocelli nulli? Alæ anticæ longissimæ, angustæ, apice truncatæ, venis 12 longitudinalibus inter angulum apicalem et analem.
This subgenus is proposed for the two African species, D. sinuosa and $D$. nervosa, described by Boheman, and considered by him as constituting the first section of the genus. Notwithstanding the difference of its geographical range, the author adds the following fine species from Java, which agrees with the other two in all the sub-generic characters:
T. javanica, fulva; abdomine obscuriore vittâ centrali pallidiori, alis pallidè hyalinis anticis fasciâ latâ costali fuscâ. Expans. alar. lin. Java. D. Horsfield. In Mus. Soc. Mercat. Ind.
Phenice. Rostrum pectore vix longius. Antennæ capite manifestè breviores. Oculi oblongi, vel obovati, distinctè emarginati. Ocelli distincti. Alæ anticæ quàm in Thraciâ breviores, apice subrotundatæ, venis ferè ut in Mysidiá dispositis, 12 longitudinalibus inter angulum apicalem et regionem analem.
This subgenus is proposed for the three African species $D$. fritillaris. fasciolata, and stellulata, described by Boheman, and forming his second section of Derbe.

After reviewing the characters of the preceding subgenera, the author expresses the opinion that Otiocerus (including Hypnis, Burm.) and Anotia of Kirby, must also be considered as subgenera of equal rank with the preceding ; that Anotia coccinea, Guér. Icon. R. An. MS. pl. 58, f. 3, forms another subgenus; and that the two following groups also constitute two other subgenera of Derbe :
Patara. Rostrum ad basin pedum posticorum extensum. Oculi maximi, subtùs emarginati. Oculi obsoleti. Antennæ maximæ, compressæ, verrucosæ, apice subtruncato et setigero. Alæ anticæ longitudine mediocres, apice rotundatæ, venis paucis cellulisque tribus discoidalibus.
P. guttata, capite thoraceque fulvis, alis anticis griseo-fuscis margine alboguttatis. Expans. alar. lin. Insula $S^{\text {ti Vincent. D. Guilding. Mus. }}$ D. Hope.
$P$. albida, luteo-albida; antennis nigricantibus, alis anticis albis farinosis apicem versus fuscescenti-tinctis, guttis albis sanguineisque ornatis: Expans. alar. lin. Insula $S^{t 1}$ Vincent. D. Guilding. Mus. D. Норе.
Cenchrea. Frons capitis parùm producta. Oculi magni, emarginati. Ocelli 2. Antennæ minutæ, articulo 2do brevi subrotundato. Prothorax latus, lateribus concavo-dilatatis pro receptione antenuarum. Alæ anticæ elongatæ, angulo antico apicali valdè obtuso, venis perpaucis longitudinalibus.
C. dorsalis, pallidè testaceo-fulva; alis anticis flavescentibus margine interno fuscis apice punctis duobus purpureis. Expans. alar. lin. Insula ${ }^{t t 1}$ Vincent. D. Guilding. Mus. D. Hope.
The species above described, together with their structural characters, and especially the variations in the direction of the veins of the wings, were illustrated by numerous magnified figures.

## ENTOMOLOGICAL SOCIETY OF LONDON.

Jan. 6th, 1840.-The Rev. F. W. Hope, M.A., F.R.S., \&c., President, in the Chair.

The President announced the safe arrival of W. S. Macleay, Esq., and his collections in New South Wales, and his intention to publish descriptions of various remarkable Australian groups. He had ascertained that the Agarista are diurnal in their flight, thus confirming their relation with the Urania, as suggested in his memoir in the Transactions of the Zoological Society.

Mr. Westwood announced the capture of a species of Cerapterus (but forming a separate subgenus) near Rio Janeiro, all the other species of the family Paussida being inhabitants of the old world.

Mr. Waterhouse exhibited some remarkably small specimens of Garden white butterflies, captured in Devonshire, but very confined in their locality.

The President exhibited specimens of Goliathus torquatus ㅇ, Eudacilla Morgani, and other rare insects, recently received by him from Sierra Leone; also a new species of Adelotopus and another genus allied thereto, with other insects from New Holland.

Mr. Westwood exhibited a living specimen of Clerus alvearius, which he had recently reared from a nest of Osmia muraria, brought by him from France two years and a half previously.

The following memoirs were read :
Description of a new species of Trachyderes. By Edward Newman, Esq., F.L.S.

Trachyderes venustus, N. Piceus, elytrorum fusciis duabus maculdque singuli subrotundd apicali late stramineis: scutello elongato sublineari medio longitudinaliter impresso, piceo. Corp. long. l, 15 unc. Inhabits Demerara. Mr. Schomburgk.
Observations on the species of Spiders which inhabit cylindric tubes, covered with a moveable trap-door. By J. O.Westwood, Esq., F.L.S.

After noticing the various species of Spiders which have been described as making trap-door nests, and determining the West Indian
species to be the Aranea venatoria of Linnæus, and to belong to the genus Actinopus, Pty. (Sphodros, Wlck.) instead of Mygale and Cteniza, to which it has been referred, a very detailed description is given of a new species congenerous with the last mentioned insect, of which living specimens had been forwarded to the Society from Barbary by Edward A. Drummond Hay, Esq., Her Majesty's consulgeneral at Tangiers, with the following characters.

Actinopus ædificatorius, W. Piceo-niger nitidissimus, corpore subtus pilisque maxillarum pallidioribus ; abdomine obscuro fuscosericeo, subtus ad basin maculis 4 luteis; cephalo-thorace supra et postice semicirculariter valde impresso, pedibus longitudine fere aqualibus. Long. corp. lin. 14. Inhabits Barbaria. Mr. Drummond Hay.
Observations on the structural characters of the Death-watch, with the description of a new British genus belonging to the family of Psocida. By J. O. Westwood, F.L.S.

After noticing the inaccuracies into which several recent authors have fallen relative to the structure of the Death-watch, a new British genus is characterized as follows :

Clothilla, W. Corpus apterum. Caput subtriangulare. Antenne longa, articulis circiter 27. Prothorax brevis. Pedes simplices, tarsis 3-articulatis.
Clothilla studiosa, W. Luteo-albida, oculis brunneis, antennis fuscis, labro albido, incisuris abdominis brunneis, pedibus albidis. Long. corp. lin. 1. Inhabits the interior of houses.
February 3rd.-The Rev. F. W. Hope, President, in the Chair.
Mr. Westwood exhibited some original drawings of Crustacea made by Mr. Wallcot of Bristol, also various larvæ forwarded to him by Mr. Wallcot, jun., including one which that gentleman had no hesitation in considering as that of Platyrhinus latirostris, which, however, closely resembled the larva of a Leptura.

He also exhibited drawings of a minute white Acarus, found on the backs of books placed against a damp wall, and also of the larva and pupa of a species of Latridius found in the same situation, and of an exceedingly minute 6 -footed Acarus (visible only with a lens of high power) found amongst the hairs of the body of the last-mentioned larva.

Mr. S. Stevens exhibited a beautiful moth of large size from the interior of Africa, having the appearance of the genus Erebus, but with short palpi and shortly bipectinated antennæ, belonging to the family Bombycida (Saturnia Isis, Westw. MSS., of which a figure and description will shortly appear in the ' Naturalist's Library').

Mr. Hope exhibited a Scolopendra from New South Wales, in which one of the two hind feet was very much smaller than the other, and which was supposed to have resulted from the reproduction of the limb.

The conclusion of Mr. Westwood's memoir on Trap-door Spiders was read.

